AMENDMENTS to the Claims:

Without prejudice, this listing of claims will replace all prior versions and listings of the claims in the present application:

Listing of Claims:

1-9. (Canceled).

10. (Currently Amended) A bus station for exchanging with other bus stations a communication including a data packet and transmission information, comprising:

an arrangement for storing position information of the bus station in relation to a sequence of bus stations;

an arrangement for determining, from the transmission information, position information of the one of the bus stations that is transmitting;

an arrangement for, on receiving the communication, determining a time slot belonging to the bus station on the basis of the position information of the one of the bus stations that is transmitting and the position information of the bus station; [[and]]

an arrangement for sending the communication including the data packet after the data packet is received, the communication being sent in a next time slot belonging to the bus station;

an arrangement, in transmitting the communication, for using the direction vector of the received communication;

an arrangement, after the communication has been sent, depending on the direction vector, for checking on whether another bus station has repeated the data packet sent in the communication; and

an arrangement for sending the communication again if no other bus station has repeated the sent data packet;

wherein the communication includes a direction vector indicating that a sequence will be run through in one of a first direction and a second direction that is opposite to the first direction.

11. (Canceled).

12. (Previously Presented) The bus station according to claim 10, further comprising:

an arrangement capable of receiving another communication including another data packet of a data source; and

an arrangement for sending, on receiving a communication from the data source, a communication with the other data packet to the other bus stations.

13. (Canceled).

14. (Previously Presented) The bus station according to claim 13, wherein:

when the direction vector is in the first direction, a repetition of the data packet is monitored; and

when the direction vector is in the second direction, the repetition of the data packet is not monitored.

15. (Previously Presented) The bus station according to claim 14, further comprising:

an arrangement for sending a communication with the direction vector in the first direction when a communication is received from a data source.

16. (Currently Amended) ~~The bus station according to claim 11, further comprising:~~ A bus station for exchanging with other bus stations a communication including a data packet and transmission information, comprising:

an arrangement for storing position information of the bus station in relation to a sequence of bus stations;

an arrangement for determining, from the transmission information, position information of the one of the bus stations that is transmitting;

an arrangement for, on receiving the communication, determining a time slot belonging to the bus station on the basis of the position information of the one of the bus stations that is transmitting and the position information of the bus station;

an arrangement for sending the communication including the data packet after the data packet is received, the communication being sent in a next time slot belonging to the bus station,

wherein the communication includes a direction vector indicating that a sequence will be run through in one of a first direction and a second direction that is opposite to the first direction; and

an arrangement by which, when a communication is received from one of another bus station and a data source having a data packet, a communication having the direction vector in the second direction and the data packet of the received communication can be sent.

17. (Previously Presented) The bus station according to claim 10, further comprising:

an arrangement by which, when a communication is received from one of another bus station and a data source having a data packet, a first communication having the same data packet and a direction vector in a first direction can be sent, and in a following time slot a second communication having the data packet of the received communication and the direction vector in a second direction can be sent.

18. (Previously Presented) The bus station according to claim 10, further comprising:

an arrangement by which, when a first communication including the data packet is received and a second communication is received after the first communication but before a sending of another communication containing the received data packet of the first communication, on the basis of the transmission information, a length of the data packet, and a direction vector, a remaining residual transit time of the first and second communications can be calculated, and only the one of the first and second communications having a shorter remaining transit time is processed further.

19. (Previously Presented) The bus station according to claim 14, wherein if the sequence of bus stations in the first direction terminates in the bus station, then the bus station has a number of connections to other bus stations one of greater than and equal to any other bus station.

20. (Previously Presented) The bus station according to claim 19, wherein, after the bus station receives the communication with data packet and the direction vector, the bus station sends the communication with the data packet and an opposite direction vector.

21. (Previously Presented) The bus station according to claim 14, wherein if the sequence of bus stations in the second direction terminates in the bus station, then the bus station has a number of connections to other bus stations one of less than and equal to any other bus station.

22. (Previously Presented) The bus station according to claim 21, wherein, after the bus station receives the communication with data packet and the direction vector, the bus station does not send the communication with the data packet.